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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 10/021,224      | 10/30/2001  | Nelson Liang An Chang | 10014325-1          | 1122             |

7590 09/23/2004  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

DETWILER, BRIAN J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2173

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/021,224

Applicant(s)

AN CHANG ET AL.

Examiner

Brian J. Detwiler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 13 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 11, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The non-patent references cited in the IDS filed 22 December 2003 (Koiso et al. and Shiode N. et al.) are missing from the case. Applicant is kindly asked to resubmit copies of these references in response to this action so that they can be properly considered.

### ***Duplicate Claims***

Applicant is advised that should claim 3 be found allowable, claim 5 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. The same holds true for claims 14 and 15. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 8, 9, 12, 13, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,835,094 (Ermel et al).

Referring to claims 1 and 12, Ermel discloses in column 4: lines 4-65 a three-dimensional graphical environment comprising a plurality of selectable data object arrangement schemes wherein images representing the data objects are arranged within the environment according to a selected one of the schemes.

Referring to claim 2, Ermel discloses in column 4: lines 60-65 selecting the data object arrangement scheme through a user interface.

Referring to claim 6, Ermel discloses in Figures 7-11 partitioning the three-dimensional graphical environment into three-dimensional areas and displaying related groups of representative images within the areas, wherein the representative images are related based on the selected scheme.

Referring to claim 8, Ermel discloses in column 4: lines 60-65 rearranging representative images within the environment dependent on a newly selected one of the schemes.

Referring to claim 9, Ermel discloses in column 4: lines 60-65 and Figures 7-11 rearranging representative images within the environment dependent on a newly selected one of the schemes by repartitioning the three-dimensional graphical environment into three-dimensional areas and redisplaying related groups of representative images within the areas, wherein objects are related dependent on the newly selected scheme.

Referring to claim 13, Ermel discloses in Figures 7-11 partitioning the three-dimensional graphical environment into three-dimensional areas and displaying related groups of representative images within the areas, wherein the representative images are related based on the selected scheme. All schemes must inherently comprise a set of environment design rules that separate one scheme from another. Furthermore, the pieces of software code responsible for

generating the partitions and placing the representative images can be referred to as an environment partitioner and an object placement locator respectively.

Referring to claim 16, Ermel's invention, based on Figures 1-11, must inherently comprise software code representative of an environment creation processor for generating three-dimensional image data corresponding to the displayed environment dependent on the layout information and dependent on a set of appearance design rules and generating three-dimensional image data corresponding to the representative images arranged within the three-dimensional image data dependent on the placement information.

Referring to claim 17, Ermel discloses in column 4: lines 4-65 a method for browsing a plurality of objects within a three-dimensional graphical environment comprising: selecting one of a plurality of data object arrangement schemes, grouping data objects according to the selected scheme, partitioning the environment (via containers) into a plurality of areas dependent upon the number of objects per grouping (see also Figures 1-6), and rendering the three-dimensional environment including images representing the data objects grouped within each area dependent on the selected scheme.

Referring to claim 18, Ermel discloses in column 4: lines 60-65 selecting the data object arrangement scheme through a user interface.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5, 7, 10, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,835,094 (Ermel et al) and U.S. Patent Application Publication No. US2002/0075312 A1 (Amadio et al).

Referring to claims 3-5, Ermel discloses the method of claims 1 and 2 as discussed above but fails to disclose that the data object arrangement schemes are related to data object metadata. Amadio, though, discloses in paragraph 36 that different types of metadata or sort properties can be used to organize a plurality of data objects in a graphical environment. In other words, the arrangement schemes are related to data object metadata as claimed. Amadio explains in paragraph 36 that a plurality of common metadata types and more specific metadata types allow users to organize data objects based on "revision date, length, dimensions, album, artist, year, track, author, date picture taken, and any other property that may be useful to identify an item type." Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to associate Ermel's three-dimensional object arrangement schemes with data object metadata as taught by Amadio. Doing so would have been advantageous because it would allow users to quickly organize their data objects according to relevant sort properties.

Referring to claim 7, Ermel discloses in Figures 7-11 partitioning the three-dimensional graphical environment into three-dimensional areas and displaying related groups of representative images within the areas, wherein the representative images are related based on the selected scheme.

Referring to claim 10, Ermel discloses the method of claim 6 as discussed above but fails to disclose organizing representative images according to an auxiliary data object arrangement

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scheme. Amadio, though, discloses organizing data objects by “revision date, length, dimensions, album, artist, year, track, author, date picture taken, and any other property that may be useful to identify an item type.” Said properties can be considered auxiliary data.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to associate Ermel’s three-dimensional object arrangement schemes with data object metadata as taught by Amadio. Doing so would have been advantageous because it would allow users to quickly organize their data objects according to relevant sort properties.

Referring to claims 19 and 20, Ermel discloses the method of claims 17 and 18 as discussed above but fails to disclose that the data object arrangement schemes are related to data object metadata. Amadio, though, discloses in paragraph 36 that different types of metadata or sort properties can be used to organize a plurality of data objects in a graphical environment. In other words, the arrangement schemes are related to data object metadata as claimed. Amadio explains in paragraph 36 that a plurality of common metadata types and more specific metadata types allow users to organize data objects based on “revision date, length, dimensions, album, artist, year, track, author, date picture taken, and any other property that may be useful to identify an item type.” Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to associate Ermel’s three-dimensional object arrangement schemes with data object metadata as taught by Amadio. Doing so would have been advantageous because it would allow users to quickly organize their data objects according to relevant sort properties.



***Allowable Subject Matter***

Claims 11, 14, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: In combination with the claimed subject matter, the prior art does not teach or fairly suggest determining the size of a partitioned area based on the number of objects within a group. The closest prior art, Ermel et al, teaches determining the size of a partitioned area based on its location on the display.

***Conclusion***

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach a plurality of three-dimensional user interfaces.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Detwiler whose telephone number is 703-305-3986 through October 20, 2004. The examiner's phone number thereafter will be 571-272-4049. The examiner can normally be reached Monday through Thursday from 8am-5:30pm and alternating Fridays from 8am-4:30pm.

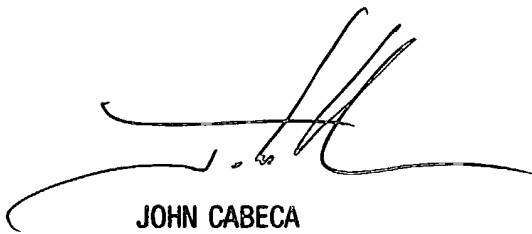
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Cabeca can be reached at 703-308-3116 through October 20, 2004. Mr.

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Cabeca will be reachable at 571-272-4048 after October 20th. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bjd



**JOHN CABECA**  
SUPERVISORY PATENT EXAMINER  
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